

WHAT IS CLAIMED IS:

1. An inspection device including:
a light source;
a pellicle beamsplitter for receiving light from the light source and redirecting said light;
an aperture array for receiving light from the pellicle beamsplitter where the aperture array includes multiple arrays; and
an imaging system including an object imager including a plurality of lenses, a camera reimager including a plurality of lenses, and a camera for collecting focused light.
2. The inspection device of claim 1 wherein the multiple arrays include multiple arrays of pinholes.
3. The inspection device of claim 2 wherein the multiple arrays include multiple one dimensional arrays of pinholes.
4. The inspection device of claim 3 wherein each one dimensional array in the multiple one dimensional arrays of pinholes is conjugate to a different height from a surface to be inspected.
5. The inspection device of claim 4 wherein each one dimensional array in the multiple one dimensional arrays of pinholes is conjugate to a different height from a surface to be inspected.
6. The inspection device of claim 5 wherein the camera is one of a multi-sensor line scan camera, a multi-sensor TDI line scan camera, and a CMOS area scan camera.

7. The inspection device of claim 2 wherein the multiple arrays include multiple two dimensional arrays of pinholes.
8. The inspection device of claim 7 wherein each two dimensional array in the multiple two dimensional arrays of pinholes is conjugate to a different height from a surface to be inspected.
9. The inspection device of claim 8 wherein the camera is one of a multi-sensor line scan camera, a multi-sensor TDI line scan camera, and a CMOS area scan camera.